



THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Stephen G. Rybicki

Art Unit : 3621

Serial No. : 09/205,020

Examiner : Mary Cheung

Filed : December 4, 1998

Title : SYNCHRONIZATION OF DATABASES

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

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INFORMATION DISCLOSURE STATEMENT

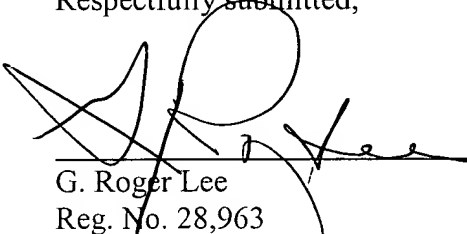
Applicant submits the references listed on the attached form PTO-1449. Applicant does not concede that the listed references are prior art.

The enclosed references have come to applicants' attention in connection with litigations involving other patents owned by the assignee, Pumatech, Inc.

This filing is being made with the filing of a Request for Continued Examination. No fee is required.

Respectfully submitted,

Date: 10/22/03


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I hereby certify under 37 CFR §1.8(a) that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated below and is addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Substitute Form PTO-1449 (Modified) Information Disclosure Statement by Applicant (Use several sheets if necessary) (37 CFR §1.98(b))	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 05110-019001	Application No. 09/205,020
	Applicant Stephen G. Rybicki		
	Filing Date December 4, 1998	Group Art Unit 3621	

U.S. Patent Documents							
Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	AA	6,405,218	06/11/02	Boothby			
	AB	6,330,568	12/11/01	Boothby			
	AC	6,324,542	11/27/01	Wright Jr. et al.			
	AD	6,272,074	08/07/01	Winner			
	AE	6,233,452	05/15/01	Nishino			
	AF	6,212,221	04/03/01	Wakayama et al.			
	AG	6,098,078	01/08/00	Gehani et al.			
	AH	6,018,303	01/25/00	Sadeh			
	AI	5,995,980	11/30/99	Olson et al.			
	AJ	5,974,238	10/26/99	Chase, Jr.			
	AK	5,966,714	10/12/99	Huang et al.			
	AL	5,956,508	09/21/99	Johnson et al.			
	AM	5,924,094	07/13/99	Sutter			
	AN	5,892,909	04/06/99	Grasso et al.			
	AO	5,877,760	03/02/99	Onda et al.			
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	AQ	5,875,242	02/23/99	Glaser et al.			
	AR	5,832,218	11/03/98	Gibbs et al.			
	AS	5,819,274	10/06/98	Jackson Jr.			
	AT	5,819,272	10/06/98	Benson			
	AU	5,813,009	09/22/98	Johnson et al.			
	AV	5,809,494	09/15/98	Nguyen			
	AW	5,758,083	05/26/98	Singh et al.			
	AX	5,737,539	04/07/98	Edelson et al.			
	AY	5,706,509	01/06/98	Man Hak Tso			
	AZ	5,706,452	01/06/98	Ivanov			
	AAA	5,704,029	12/30/97	Wright Jr.			

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U.S. Patent Documents

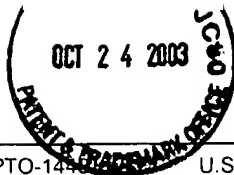
Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	ABB	5,671,407	09/23/97	Demers et al.			
	ACC	5,659,741	08/19/97	Eberhardt			
	ADD	5,649,182	07/15/97	Reitz			
	AEE	5,623,540	04/22/97	Morrison et al.			
	AFF	5,615,109	03/25/97	Eder			
	AGG	5,608,865	03/04/97	Midgely et al.			
	AHH	5,581,754	12/03/96	Terry et al.			
	ALL	5,581,753	12/03/96	Terry et al.			
	AJJ	5,557,518	09/17/96	Rosen			
	AKK	5,530,939	06/25/96	Mansfield, Jr. et al.			
	ALL	5,530,853	06/25/96	Schell et al.			
	AMM	5,455,945	10/03/95	VanderDrift			
	ANN	5,421,012	05/30/95	Khoyi et al.			
	AOO	5,412,801	05/02/95	De Remer et al.			
	APP	5,323,314	06/21/94	Baber et al.			
	AQQ	5,276,876	01/04/94	Coleman et al.			
	ARR	5,220,540	06/15/93	Nishida et al.			
	ASS	5,201,010	04/06/93	Deaton et al.			
	ATT	5,197,000	03/23/93	Vincent			
	AUU	5,134,564	07/28/92	Dunn et al.			
	AVV	5,124,912	06/23/92	Hotaling et al.			
	AWW	4,939,689	07/03/90	Davis et al.			
	AXX	4,831,552	05/16/89	Scully et al.			
	AYY	4,819,191	04/04/89	Scully et al.			
	AZZ	4,817,018	03/28/89	Cree et al.			
	AAAA	4,807,155	02/21/89	Cree et al.			
	ABBB	4,807,154	02/21/89	Scully et al.			

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**Information Disclosure Statement
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U.S. Patent Documents							
Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	ACCC	4,162,610	07/31/79	Levine			

Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Initial	Desig. ID	Document
	ADDD	Adly, "HARP: A Hierarchical Asynchronous Replication Protocol for Massively Replicated Systems," Computer Laboratory, Cambridge University, United Kingdom (undated)
	AEEE	Adly et al., "A Hierarchical Asynchronous Replication Protocol for Large Scale Systems," Computer Laboratory, Cambridge University, United Kingdom, Computer Science Department, Alexandria University, Egypt (undated)
	AFFF	Alexander, "Designed, sold, delivered, serviced," Computerworld Client/Server Journal, pp. 43 (10/01/95)
	AGGG	"All I need is a miracle; computer-aided educational packages; Small Wonders," Coastal Associates Publishing L.P. (03/1992)
	AHHH	Alonso et al., "Database System Issues in Nomadic Computing," Matsushita Information Technology Laboratory, New Jersey (undated)
	AIII	Badrinath et al., "Impact of Mobility on Distributed Computations," Operating Systems Review (April 1, 1993)
	AJJJ	Barbara et al., "Sleeper and Workaholics: Caching Strategies in Mobile Environments (Extended Version)" (08/29/1994)
	AKKK	Bowen, M. et al., "Achieving Throughput and Functionality in a Common Architecture: The Datacycle Experiment, <i>IEEE</i> , pp. 178, 1991.
	ALLL	Brandel, "New offerings fuel revival of PIM," Computerworld, p. 39 (09/12/94)
	AMMM	Brodersen, "InfoPad-An Experiment in System Level Design and Integration," (03/01/97)
	ANNN	Demers et al., "The Bayou Architecture: Support for Data Sharing Among Mobile Users," Computer Science Laboratory, Xerox Palo Alto Research Center, California (undated)
	AOOO	DeVoe et al., "SOFTWARE: Day-Timer Organizer 2.0 based on format of paper-based PIM," InfoWorld, Vol. 17 (08/21/95)
	APPP	Froese, "File System Support for Weakly Connected Operation," pp. 229-238 (undated)
	AQQQ	Greenberg et al., "Real Time Groupware as a Distributed System: Concurrency Control and its Effect on the Interface," Procs. Of the ACM CSCW Conf. On Computer Supported Cooperative Work, Oct. 22-26, North Carolina, ACM Press (01/01/94)
	ARRR	Guy, "Ficus: A Very Large Scale Reliable Distributed File System," Technical Report CSD-910018, Computer Science Dept. UCLA (Technical Report) (06/03/91)
	ASSS	Guy et al., "Implementation of the Ficus Replicated File System," appeared in Procs. Of the Summer USENIX Conf., Anaheim, CA, pp. 63-71 (06/01/90)
	ATTT	Haber, "Renegade PIMS," Computerworld, p. 109 (12/12/94)
	AUUU	Hammer et al., "An Approach to Resolving Semantic Heterogeneity in a Federation of Autonomous, Heterogeneous Database Systems," Computer Science Department, University of Southern California (undated)

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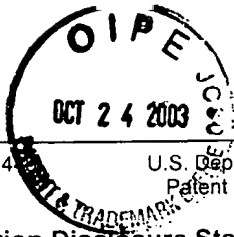
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	AVVV	Hammer et al., "Object Discovery and Unification in Federated Database Systems," University of Southern California (undated)
	AWWW	HP and IntelliLink connect HP 95LX with HP NewWave; IntelliLink for the HP NewWave; product announcement," HP Professional (08/1991)
	AXXX	"HP announces expanded memory version of palmtop PC, introduces 1-Megabyte HP 95LX and 1-Megabyte memory cards," Business Wire, Inc. (03/04/92)
	AYYY	Huston et al., "Disconnected Operation of AFS," CITI Technical Report 93-3, Center for Information Technology Integration, University of Michigan (06/18/93)
	AZZZ	IBM Dictionary of Computing, Tenth Edition, 1993, pp. 268, 269, 31_
	AAAAA	IBM Dictionary of Computing, Tenth Edition, 1993, pp. 165, 268, 349, 370, 417
	ABBBB	IEEE Standard Dictionary of Electrical and Electronics Terms, Fourth Edition, 1988, p. 372, 368, 509, 563
	ACCCC	Imielinski, "Mobile Computing - DataMan Project Perspective," Rutgers University (undated)
	ADDDD	"IntelliLink 2.2: the software connection from desktop to palmtop; Software Review; IntelliLink 2.2; Evaluation," PC Magazine (04/28/92)
	AEEEE	"IntelliLink transfers palmtop, PC data; communications software from IntelliLink Inc; brief article; Product Announcement," PC Week (11/18/91)
	AFFFF	Jacobs et al., "A Generalized Query-by-Example Data Manipulation Language Based on Database Logic," IEEE Transactions on Software Engineering, Vol. SE-9, No. 1 (01/1983)
	AGGGG	Jenkins, "Users struggle with E-mail Woes," Computerworld, p. 97 (10/24/94)
	AHHHH	Johnson et al., "Hierarchical Matrix Timestamps for Scalable Update Propagation," submitted to the 10 th Int. Workshop on Distributed Algorithms (06/25/96)
	AIIII	Joshi et al., "A Survey of Mobile Computing Technologies and Applications," (10/29/95)
	AJJJJ	Kistler et al., "Disconnected Operation in the Coda File System," School of Computer Science, Carnegie Melon University, Pennsylvania (undated)
	AKKKK	Krill, "NETWORKING: Tech Update," InfoWorld, vol. 18 (02/12/96)
	ALLLL	Kumar et al., "Log-Based Directory Resolution in the Coda File System," School of Computer Science, Carnegie Melon University, Pennsylvania (undated)
	AMMMM	Larson et al., "A Theory of Attribute Equivalence in Databases with Application to Schema Integration," IEEE Transactions on Software Engineering, Vol. 15, No. 4, April 1989
	ANNNN	Mannino et al., "Matching Techniques in Global Schema Design," IEEE 1984
	AOOOO	Marshall, "Product Reviews: Windows contact managers," InfoWorld, Vol. 18 (03/25/96)
	APPPP	McGoveran, "Distributed not yet delivered," Computerworld, p. 112 (06/06/94)
	AQQQQ	Meckler Corporation, "Palmtop-to-desktop linkage software," Database Searcher (06/1992)
	ARRRR	Microsoft Press Computer Dictionary, Second Edition, 1994, p. 164
	ASSSS	Microsoft Press Computer Dictionary, Second Edition, 1994, pp. 105, 217, 227, 228

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(37 CFR §1.98(b))

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Examiner Initial	Desig. ID	Document
	ATTTT	Microsoft Press Computer Dictionary, Third Edition, 1997, pp. 194, 228, 234, 449
	AUUUU	Milliken, "Resource Coordination Objects: A State Distribution Mechanism," (DRAFT) (12/10/93)
	AVVVV	Nash, "Replication falls short," Computer world, p. 65 (11/21/94)
	AWWWW	Noble et al., "A Research Status Report for Adaptation for Mobile Data Access," School of Computer Science, Carnegie Melon University (undated)
	AXXXX	"PackRat PIM gets older and wiser with Release 4.0; PIM update sports enhanced interface, greater ease of use," InfoWorld (12/23/91)
	AYYYY	"Palmtop PCs: power by the ounce; Hardware Review; overview of six evaluations of palm-top computers; includes related articles on Editor's Choices, suitability-to-task ratings, impressions by individual users; evaluation," PC Magazine (07/1991)
	AZZZZ	"Pen-based PCs ready for prime time; includes related article on comparison of operating systems, list of vendors of pen-based products," PC-Computing (11/1991)
	AAAAAA	Perera, "Synchronization Schizophrenia," Computerworld Client/Server Journal, p. 50 (10/01/95)
	ABBBBB	Petersen et al., "Bayou: Replicated Database Services for World-wide Applications," Computer Science Laboratory, Xerox Palo Alto Research Center, California (undated)
	ACCCCC	"Product comparison: Atari Portfolio, Casio Executive BOSS, HP 95LX, Poqet PC, Psion series 3, Sharp Wizard," InfoWorld (12/16/91)
	ADDDDD	"PRODUCT COMPARISON: Personal information managers," InfoWorld, vol. 17 (08/07/95)
	AEEEEEE	Qu et al., Technical Report entitled "Mobile File Filtering," TR-CS-97-02-Australian National University (02/01/97)
	AFFFFFF	Radosevich, "Replication mania," Computerworld Client/Server Journal, p. 53 (10/01/95)
	AGGGGG	Ratner et al., "The Ward Model: A Replication Architecture for Mobile Environments," Department of Computer Science, University of California (undated)
	AHHHHH	Reiher et al., "Peer-to-Peer Reconciliation Based Replication for Mobile Computers," UCLA (undated)
	AIIIII	Reiher et al., "Resolving File Conflicts in the Ficus File System," Department of Computer Science, University of California (undated)
	AJJJJJ	Ricciuti, "Object database server," InfoWorld, Vol. 18 (01/29/96)
	AKKKKK	"Riding the NewWave from PC to Palmtop: IntelliLink lets NewWave users transfer files," InfoWorld (06/03/91)
	ALLLLL	Saltor et al., "Suitability of data models as canonical models for federated databases," Universitat Politecnica de Catalunya, Spain (undated)
	AMMMMM	Satyanarayanan, "Coda: A Highly Available File System for a Distributed Workstation Environment," School of Computer Science, Carnegie Mellon University (undated)
	ANNNNN	Satyanarayanan, "Fundamental Challenges in Mobile Computing," School of Computer Science, Carnegie Mellon University (undated)
	AOOOOO	Satyanarayanan, "Mobile Information Access," IEEE Personal Communications, Vol. 3, No. 1 (Feb. 1996)

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Sheet 6 of 6

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Other Documents (include Author, Title, Date, and Place of Publication)

Examiner Initial	Desig. ID	Document
	APPPPP	Sherman, "Information Technology: 'What Software Should I Use to Organize My Life'," (undated)
	AQQQQQ	Sheth et al., "A Tool for Integrating Conceptual Schemas and User Views," IEEE 1988
	ARRRRR	Schilit et al., "The ParcTab Mobile Computing System," Xerox Palo Alto Research Center, California (undated)
	ASSSSS	SPI Database Software Technologies Record Displays: Record 2, Serial No. TDB0291.0094 and Record 4, Serial No. iets0901.0073 (undated)
	ATTTTT	Staten, "PowerMerge 2.0 ships; syncs moved filed," MacWEEK, Vol. 8, p. 38(1) (01/03/94)
	AUUUUU	Tait, Doctoral Thesis entitled "A File System for Mobile Computing," (01/01/1993)
	AVVVVV	Tolly, "Enhanced Notes 4.0 gets thumbs-up," Computerworld, p. 54 (12/18/95)
	WWWW	Webster's Ninth New Collegiate Dictionary, 1986, pp. 114, 436, 440, 462, 573, 597, 620, 717, 906, 963, 979, 989, 1000, 1053, 1130, 1142, 1152, 1162, 1166,
	AXXXXX	Wiederhold, Gio, Database Design, Second Edition, McGraw-Hill Book Company, 1983, p. 2
	AYYYYY	Wiederhold, Gio and Qian Xiaolei, "Consistency Control of Replicated Data In Federal Database, IEEE, pp. 130-132. 1990.
	AZZZZZ	Zaino, "Tapping the Top Values in PDAs - Personal digital assistants that sell for as little as \$300 can put a PC in the palm of your hand. Get the scoop on 8 contenders," HomePC, pp. 97 (10/01/96)
	AAAAAA	Zisman et al., "Towards Inoperability in Heterogeneous Database Systems," Imperial College Research Report No. DOC 95/11 (12/01/95)

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